

505/83
(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 August 2003 (28.08.2003)

PCT

(10) International Publication Number
WO 03/070915 A2

(51) International Patent Classification⁷: **C12N**

(21) International Application Number: PCT/US03/05163

(22) International Filing Date: 19 February 2003 (19.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/358,500 19 February 2002 (19.02.2002) US

(71) Applicant (for all designated States except US): **THE GOVERNMENT OF THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES** [US/US]; National Institutes Of Health, Office Of Technology Transfer, Suite 325, 6011 Executive Boulevard, Rockville, MD 20852-3804 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **NEGISHI, Masahiko** [JP/US]; 2054 Carriage Way, Chapel Hill, NC 27517 (US). **UEDA, Akiko** [JP/US]; Apt. 204, 5124 Copper Ridge Drive, Durham, NC 27707 (US). **PEDERSEN, Lars, C.** [US/US]; 209 Old Barn Lane, Chapel Hill, NC 27517 (US). **KAKIZAKI, Satoru** [JP/US]; 1503 Woodway Club Drive, #431, Durham, NC 27713 (US). **SUEYOSHI, Tatsuya** [JP/US]; 113 Woodshire Lane, Chapel Hill, NC 27514 (US).

(74) Agent: **NOONAN, William, D.**; Klarquist Sparkman, LLP, One World Trade Center, Suite 1600, 121 SW Salmon Street, Portland, Oregon 97204 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **MUTATED CONSTITUTIVELY ACTIVE NUCLEAR ORPHAN RECEPTOR**

(57) **Abstract:** Disclosed are constitutively active nuclear orphan receptors (CAR), which include one or more mutations which decrease the constitutive nature of CAR *in vitro*. The resulting non constitutively active nuclear orphan receptors can be used to screen for agents that metabolize xenochemicals and/or steroids.

WO 03/070915 A2